We're Ready to Help!

When you are considering installing new service or revising your existing service, ComEd is ready. Visit our New Business Portal on the ComEd website at **ComEd.com/NewBusiness**. The portal enhances the customer experience with streamlined navigation, self-service capabilities, increased transparency into their application's status, and improved communication.

- New Business Customer Service
  866-639-3532
- General ComEd Questions/Power Outages
  800-334-7661
- Hearing Impaired TTY
  800-572-5789

Call Before You Dig

Critical utility lines may be buried near your home and striking one while digging can lead to serious consequences, including service outages, severe injury, death and/or financial liability. A free 24-hour One Call service is available to both contractors and homeowners within the ComEd territory to help prevent hitting utility lines while digging. Before beginning any digging project, you must contact the appropriate utility locating service: at least 48 hours in advance for DIGGER and at least 3 business days in advance for JULIE. These services will mark underground facilities to help ensure safe excavation.

Chicago Residents: Call DIGGER 312-744-7000 or 811
Outside Chicago: Call JULIE 1-800-892-0123

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Chicago, IL 60680-5379

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The Blue Book

A guide to installing or revising your electric service

1st Edition

Whether you are installing new service or revising your existing service, we look forward to helping you complete your project in a timely, professional and, most importantly, safe manner.

We have developed this book to help you work with your professional contractors/licensed electricians and ComEd through each step of your project. We have outlined ComEd's minimum requirements. You must also check with your city or municipality for any additional requirements that may need to be met. Please also check with your assigned ComEd Project Manager to determine if any additional requirements are needed.

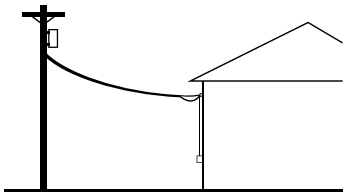
Safety is at the forefront of every project we undertake. Please take a moment to review this Blue Book to ensure your project is completed safely and properly.

Contents

Basic Service Types

Overhead

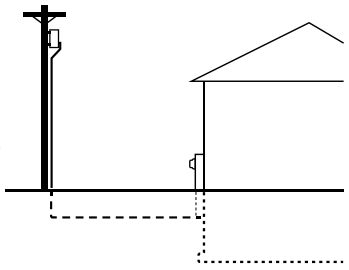
If your property is adjacent to ComEd overhead facilities, in most cases your service will be an overhead service wire, installed between the pole and your service wire attachment.



Overhead to Underground

If you desire underground cable because of obstructions or aesthetics, ComEd may provide such installation if practical. ComEd may elect to install a service pedestal near the base of the pole.

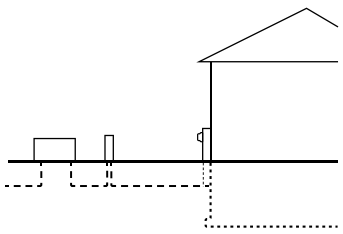
Note: *Charges will apply and conduit may be required*



Underground

If your property is adjacent to a ComEd underground facility, in most cases you may be serviced by an underground service cable.

Note: *In some cases conduit may be required*



Note:

Charges may apply to any of the above installations.

For specific service installation details, see the applicable section in this booklet. Please also check with your assigned ComEd Project Manager to determine if any additional requirements are needed.

For overhead service wire length limitations and considerations, see page 7.

For underground service considerations, refer to pages 30-39.

Installing or Revising Electric Service

There are five simple steps you must take to have electric service installed for the first time or revised at your residence. See pages 4-10 for details.

Step 1: Plan Your Project

Step 2: Apply for Service

Step 3: Coordinate With ComEd Project Manager

Step 4: Finalize Your Project

Step 5: Electric Service Installation

What to Do Before Starting Your Project:

Clarify Your Goals: Know exactly what you want to accomplish with your current project.

Consider Future Plans: Think ahead—will you be adding a room, deck, patio, or pool later? If so, where? And how will it co-exist with your current project?

Coordinate with Professionals: Even if you are uncertain of your future intentions at this stage, you should talk about them with your certified/licensed electrician. Once you submit an application, a ComEd Project Manager will be assigned. They can help you plan for future service needs and avoid costly changes later. Schedule a pre-construction walk-down as this helps identify potential issues early and allows for suggestions that can prevent delays or expensive relocations.

Why This Matters:

- Helps avoid redoing work
- Prevents service restoration delays or issues
- Saves time and money in the long run

Note:

This booklet contains some of ComEd's policies, rules and requirements as of the date of this publication.

Because this booklet is not intended to be complete and guidelines are subject to change, ComEd should be contacted for the latest and most complete requirements as they pertain to your residence.

All electrical work performed by the customer must follow the National Electric Code (NEC) and/or applicable code based on authority having jurisdiction. Detailed information for all types of service installations can be obtained on the Construction and Remodeling website at **ComEd.com/NewBusiness**.

Illegal and/or unsafe connections may be subject to immediate disconnection and tampering charges may apply. OSHA may be notified of unsafe and/or clearance issues.

Step 1: Plan Your Project

Work with your licensed/professional electrician or contractor to organize your project information before you contact ComEd.

*Please take note that there are different requirements for the City of Chicago, the suburban area residential and the subdivision work. For additional information, please refer to the FAQ at the end of the book.

Hiring a licensed, bonded electrician can ensure quality and safety in your project. They can be the go-to contact for you and ComEd, helping streamline the communications and expedite the process. The Better Business Bureau is one place to start your research for a qualified electrician. The governing authority may also have references for licensed electricians.

Please note that any easement, vegetation or land survey requirements may delay your projects.

Step 2: Apply for Service

Complete a ComEd residential service application by registering on ComEd's New Business portal online at **ComEd.com/NewBusiness**. If you can't find the answer online, call 866-NEW-ELEC (866-639-3532).

When contacting ComEd, please have the following information:

- Address where service is needed
- Your contact information/email address for additional contact info
- Your SSN or Tax ID
- Your electrician's or contractor's contact information
- The type of work you are doing, such as installing a deck, a pool, an addition, or a new home
- For projects outside of the City of Chicago, check with your authority having jurisdiction for additional requirements.
- If you live within the City of Chicago, you must have a City of Chicago permit number.

For more information on how to get started or how to navigate the New Business Portal view this short video tutorial, **ComEd.com/NBvideo**.

For Solar, EV and other associated service requests, please consult with your Solar/EV representative and note that charges and/or upgrades may still apply for non-standard requests.

For general information on Solar or Electric Vehicles visit **ComEd.com/EV** and **ComEd.com/Solar**.

Step 3: Coordinate With Project Manager

Depending on your project size and/or need, you may be assigned a ComEd Project Manager who will determine how we can best meet your electric service needs and will contact you to learn more about your project. Be prepared to discuss your project with the Project Manager:

- Project timeline
- The type of service request (overhead or underground)
- Your preferred meter location
- Voltage and amperage requirements

If needed, the assigned Project Manager will meet you at the project site to take measurements and evaluate equipment. They will create an agreement, a summary of any applicable charges, and diagrams depicting the service and will mail or email the documents to you.

Step 4: Finalize Your Project

Before ComEd can schedule your project, be sure to complete the following:

Obtain Permit and Final Inspection

Obtain the appropriate permits and complete any inspections required by your village, city, or municipality. Notify your ComEd Project Manager when the final inspection is complete. *An approved ComEd inspection is required by your rep in addition to city/village requirements.

Sign and Pay

Review, sign, and return all obligatory documents such as service applications, contracts, plat of surveys etc to your Project Manager, along with any required payment, to authorize work to begin.

Ensure ComEd Has Access to Project Site

Provide access to the project site to allow ComEd to connect your electric service and install any necessary equipment.

To ensure safe and efficient installation and maintenance of electrical equipment, customers are responsible for the following:

- Maintain a minimum 10-foot clearance in front of ground-level transformers (on the numbered side). For other and additional ComEd equipment, Please consult your ComEd Project Manager for specific guidance.
- Provide clear and unobstructed access to poles and underground cables
- Once the service route is established, keep the entire path free of any obstructions.

Step 5: Electric Service Installation

ComEd will release your service connection when your electrician's work is complete and project requirements are fulfilled.

Please keep in mind unanticipated events such as severe weather or other emergencies may impact our work efforts and schedules.

Residential Project Checklist

Use this simple checklist to help you keep track of key steps of your project.

Your Role

- ☐ Hire a licensed, bonded electrician or contractor (Refer to the Better Business Bureau or governing authority when selecting a qualified electrician)
- ☐ Contact & coordinate with other utilities, such as cable TV, telephone and internet providers
- ☐ Identify a primary point of contact with current contact info
- ☐ Complete your ComEd Service Application
- ☐ Sign & return agreement with payment to the ComEd Project Manager
- ☐ Obtain permits & arrange inspections
- ☐ Provide access to job site for ComEd
- ☐ Call to locate underground facilities prior to digging.
  Within the Chicago city limits call 312-744-7000
  Outside the Chicago city limits call 800-892-0123
- ☐ Restore landscaping
- ☐ Complete customer satisfaction survey after ComEd completes work

Please note that any easement, vegetation or land surveys requirements may delay your projects

ComEd's Role

- ☐ Assigns a Project Manager for ongoing project communications
- ☐ Prepares documents, including agreement(s) & an estimate of applicable charges
- ☐ Provides status change updates throughout your project
- ☐ Completes agreed upon work
- ☐ Contacts you to confirm project completion, including meter installation if required.

Overhead Service

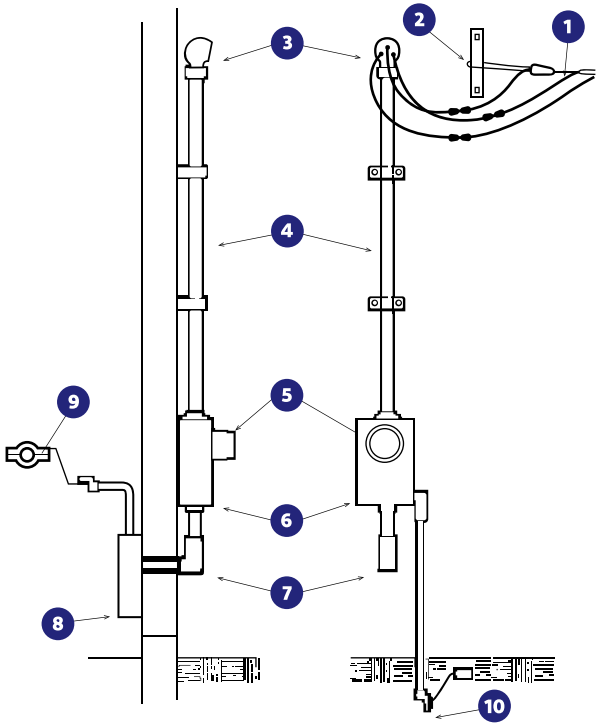
Items to consider

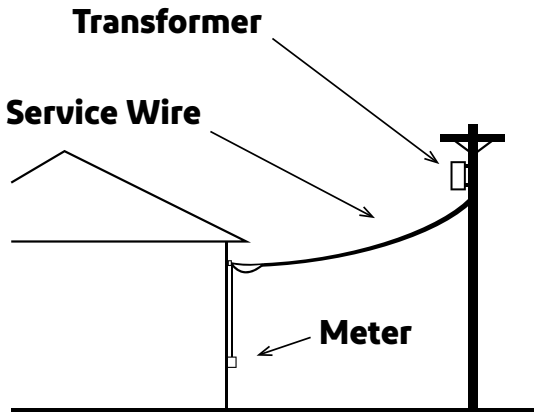
The maximum length of the service wire from the ComEd pole to the point of attachment on your residence is 150 feet depending on the size of the service to be installed.

See page 24 and 28 for service clearances. For details on rooftop deck installations refer to pages 20-22.

Your service wire head or attachment must be no more than 25' above the ground and be positioned so that it may be reached safely from a ladder on solid ground.

Overhead Service





Glossary of Terms Electric Service Entrance Equipment

1. **Overhead service wire** – the wire from the pole that attaches to the house
2. **Service wire attachment** – a metal plate, bolt or insulator service wire holder, aka "house knob", that supports the service wire to the building
3. **Service head** – a weather-tight fitting attached to the end of the service run to prevent water from entering the pipe
4. **Service run** – also referred to as service riser – the wires installed between the service head and the meter fitting
5. **Meter** – a device that measures the amount of electricity used by a customer
6. **Meter fitting** – CECHA approved housing for meter
7. **Service entrance** – the wires installed between the meter fitting connection device and the disconnecting means*
8. **Disconnecting means** – the main breaker, fuse box or breaker panel inside your home*
9. **Water pipe ground** – a safety connection to provide an electrical path to ground*
10. **Driven ground** – a safety connection to provide an electrical path to earth* please consult with local codes on grounding requirements.

Please visit **ComEd.com/ApprovedDevices**

Note:

*For clearances see pages 24-28. For grounding reference see page 47-48. *Check local codes for requirements.*

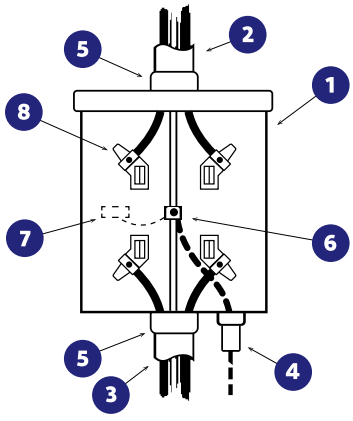
Self-Contained Meter Fitting

Single Phase, Three-Wire 120/240 or 120/208 Volts

Customer Furnishes, Installs and Maintains:

1. Meter fitting (200 amperes maximum)
2. Conduit and conductors of service run (line)
3. Conduit and conductors of service run (load)
4. Ground connection per local code
5. Insulated metallic bushing on line and load conduits
6. Neutral terminal
7. Fifth terminal with potential tap (#12 copper wire or equivalent) from neutral terminal (120/208 volt service only)
8. Horn type bypass (provided so that service will not be interrupted when a meter is removed from the socket)

Refer to C9120 at **ComEd.com/ServiceMeterRequirements** for the latest revision



Note:

Only meter connection devices labeled by the manufacturer with the letters "CECHA" are approved for use in the ComEd service area. Please visit **ComEd.com/ApprovedDevices**

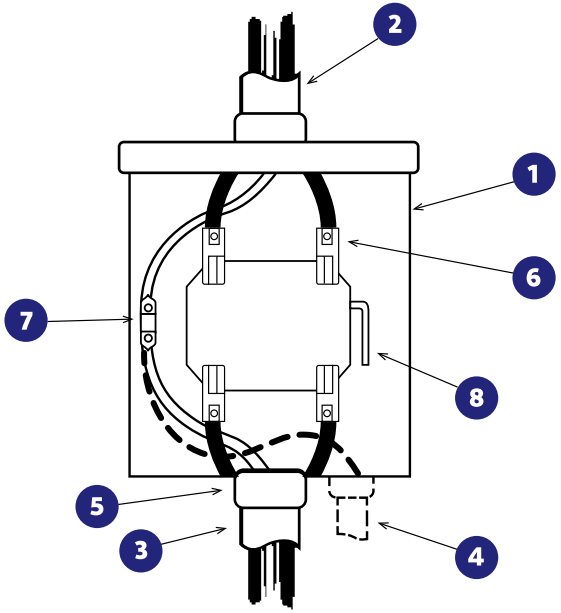
Self-Contained Outdoor Class 320

Single Position Meter Fitting Single-Phase, Three-Wire 120/240 Volts

Customer Furnishes, Installs and Maintains:

1. Meter connection device with lever actuated bypass (320 amperes maximum)
2. Conduit and conductors (line)
3. Conduit and conductors (load)
4. Ground connection per local code
5. Insulated metallic bushing on line and load conduits
6. Compression lugs for line and load conductors
7. Neutral terminal
8. Bypass arm

Refer to C9121 at **ComEd.com/ServiceMeterRequirements** for the latest revision

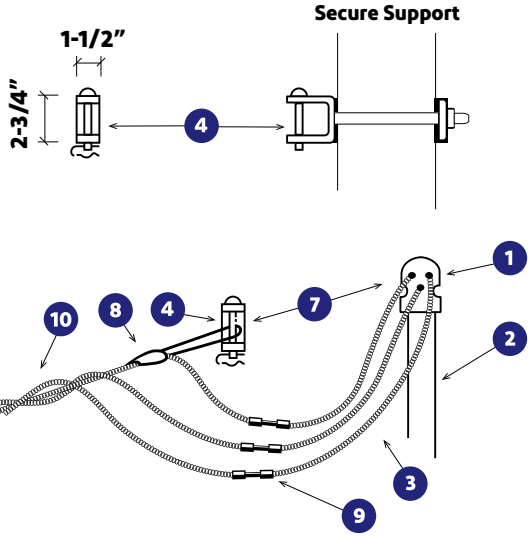


Overhead Service Attachment

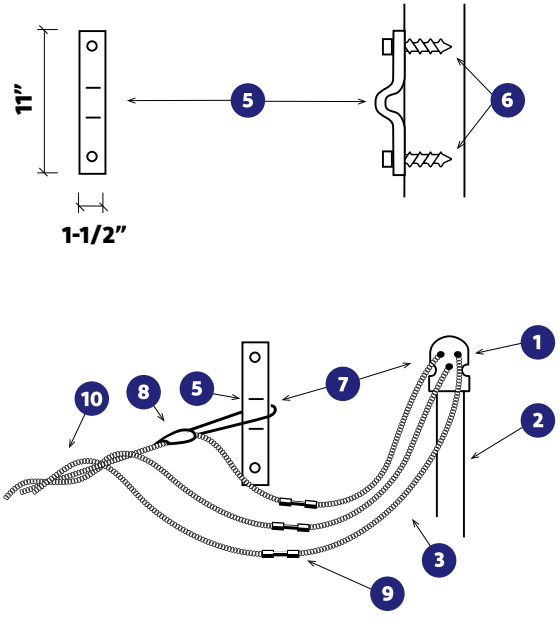
Fork Bolt and I-Plate

Fork Bolt

Refer to C7820 at **ComEd.com/ServiceMeterRequirements** for the latest revision



I-Plate



Overhead Service Attachment

Fork Bolt and I-Plate

Customer Furnishes, Installs and Maintains:

1. Service head
2. Service run conduit and conductors (load)
3. Service run wires (allow a minimum of 18 in. beyond the service head to make connections to service drop wires)
4. Service attachment (house knob approved for existing homes only)
5. I-plate
6. Securely install I-plate
7. A 4" to 18" clearance (in any direction) must be maintained between the service head and the center of the service attachment

ComEd Furnishes, Installs and Maintains:

8. Service drop dead-end
9. Connectors for connecting customer wires to service drop
10. Service wire

Note:

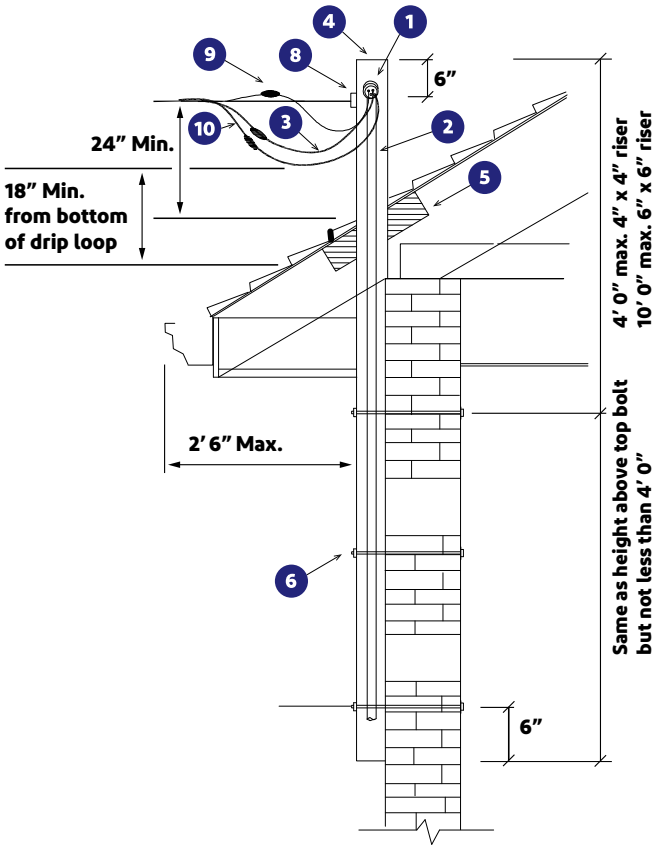
Under no circumstances shall a service attachment be made to a parapet or a chimney. The service head and attachment shall be located so that:

A) The exposed wires will adequately clear all building components including downspouts, gutters, etc.

B) The wires will be out of reach from windows, porches, or any other part of the building accessible to the occupants or the public.

Overhead Service Details

Wood Riser



Refer to C7820 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Overhead Service Details

Wood Riser

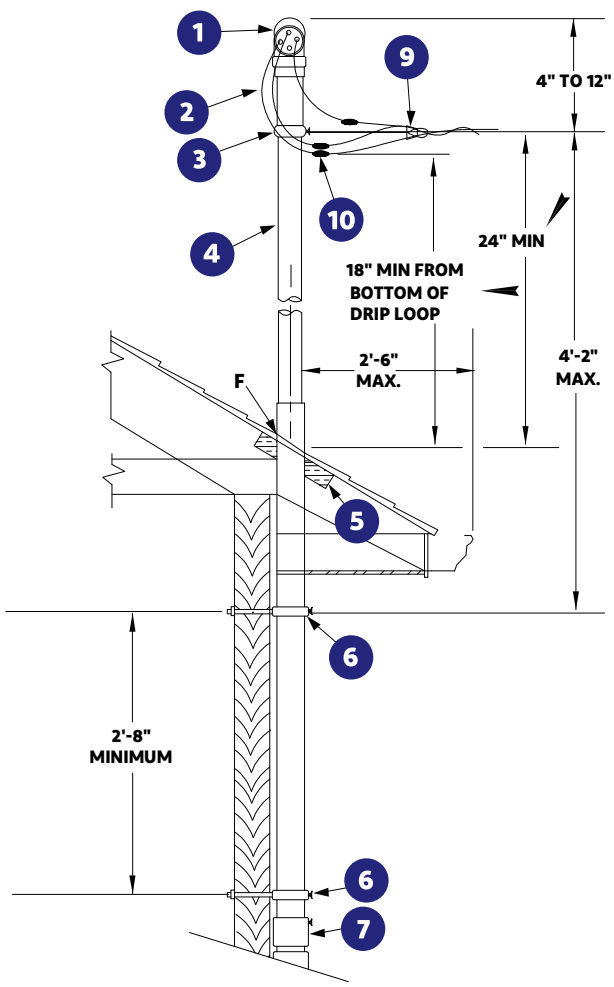
Customer Furnishes, Installs and Maintains:

1. Service head
2. Service run
3. Service run wires
   (allow a minimum of 18 in. beyond the service head to make all connections to service drop wires)
4. 4 in. x 4 in. or 6 in. x 6 in. preservative treated wood post
5. 2 in. x 4 in. blocking solidly installed between rafters
6. 5/8 in. galvanized mounting bolts (with nuts and washers)
7. Meter fitting
8. Service attachment

ComEd Furnishes, Installs and Maintains:

9. Service drop dead-end
10. Connectors for connecting customer’s wires to service drop
11. Meter

Steel Conduit Riser



INSTALLATION ON FRAME OR STUCCO WALL

Refer to C7820 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Overhead Service Details

Steel Conduit Riser

Customer Furnishes, Installs and Maintains:

1. Service head
2. Service run wires
   (allow a minimum of 18 in. beyond the service head to make connections to service drop wires)
3. Service attachment
4. Rigid steel conduit
   (2-1/2 in. for 100 ampere or smaller, or 3 in. for larger service entrance equipment)
5. 2 in. x 4 in. blocking, solidly installed between rafters
6. Mounting clamp with 1/2 in. bolts, nuts and washers
7. Steel conduit reducer
8. Meter fitting

ComEd Furnishes, Installs and Maintains:

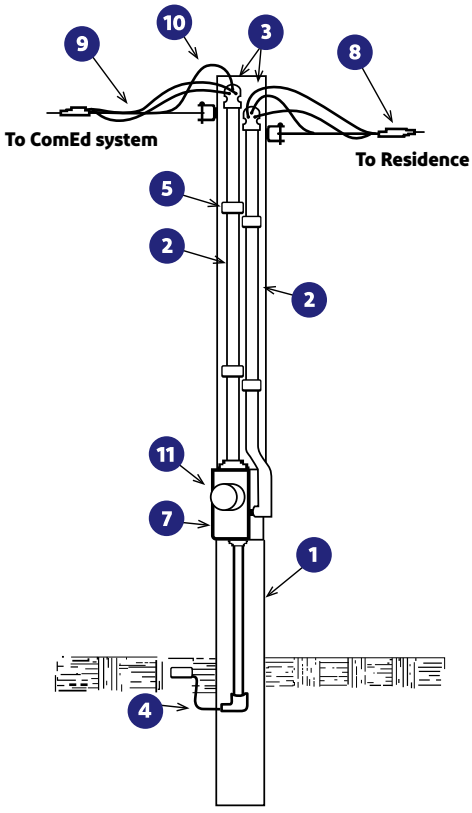
9. Service drop dead-end
10. Connectors for connecting customer's wires to service drop
11. Meter

Note:

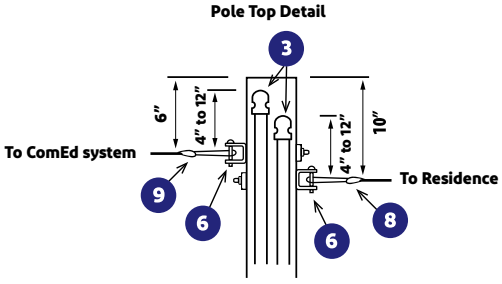
All metal parts exposed to weather shall be hot galvanized or non-ferrous.

Overhead Service Details - Rural Applications

Customer Service Pole and Outdoor Fitting



Refer to C7860 at **ComEd.com/ServiceMeterRequirements** for the latest revision



Overhead Service Details

Customer Service Pole

Customer Furnishes, Installs and Maintains:

1. Treated pole
(minimum requirements: class #7, length 25 ft.). Customer shall consult ComEd for minimum setting depth for the class and length of pole installed.
2. Service entrance cable or conductors in conduit. Allow sufficient wire to make connection to service drop wire.
3. Service heads
4. Ground rod–please consult with local codes on grounding requirements
5. Cable clamps. Maximum spacing 3 ft.
6. Fork bolt
7. CECHA approved meter fitting
8. Service wire dead-end

ComEd Furnishes, Installs and Maintains the Following Equipment Only if a Service Drop Terminates at the Pole:

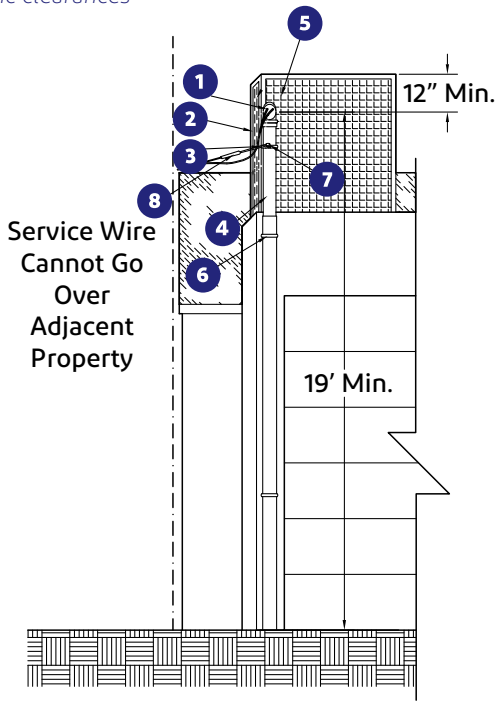
9. Service drop dead-end
10. Connectors for connecting customer wire to service drop

ComEd Furnishes, Installs and Maintains:

11. Meter

New Garage With Rooftop Deck Service Feed to Garage

Please refer to your ComEd Project Manager for specific clearances

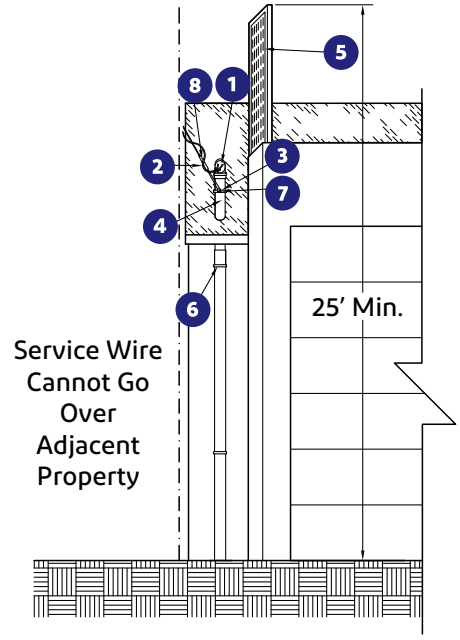


1. Service head
2. Service run wires
3. Service attachment
4. Rigid steel conduit (2-1/2 in. for 100 ampere or smaller, or 3 in. for larger service entrance equipment)
5. Lattice structure (5' min. horizontal coverage from service head)
6. Mounting clamp with 1/2 in. bolts, nuts and washers
7. Connectors for connecting customer's wires to service drop
8. Service drop dead-end

Overhead Service Details

Existing Garage With New Rooftop Deck Service Feed Through Walk Way

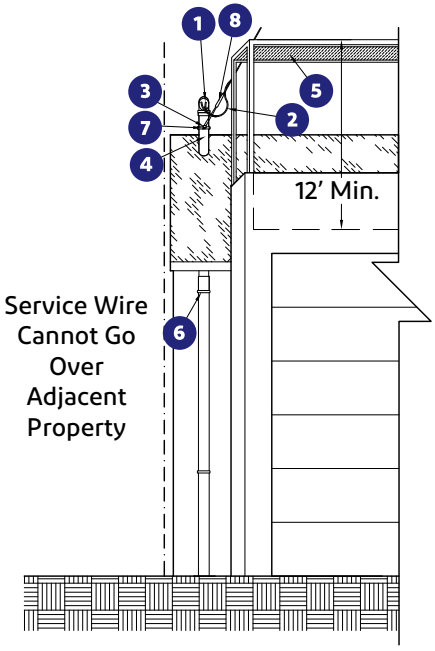
Please refer to your ComEd Project Manager for specific clearances



1. Service head
2. Service run wires
3. Service attachment
4. Rigid steel conduit (2-1/2 in. for 100 ampere or smaller, or 3 in. for larger service entrance equipment)
5. Lattice structure (1' min. vertical coverage from service wire)
6. Mounting clamp with 1/2 in. bolts, nuts and washers
7. Connectors for connecting customer's wires to service drop
8. Service drop dead-end

Existing Garage With New Rooftop Deck Service Feed Over Roof Deck

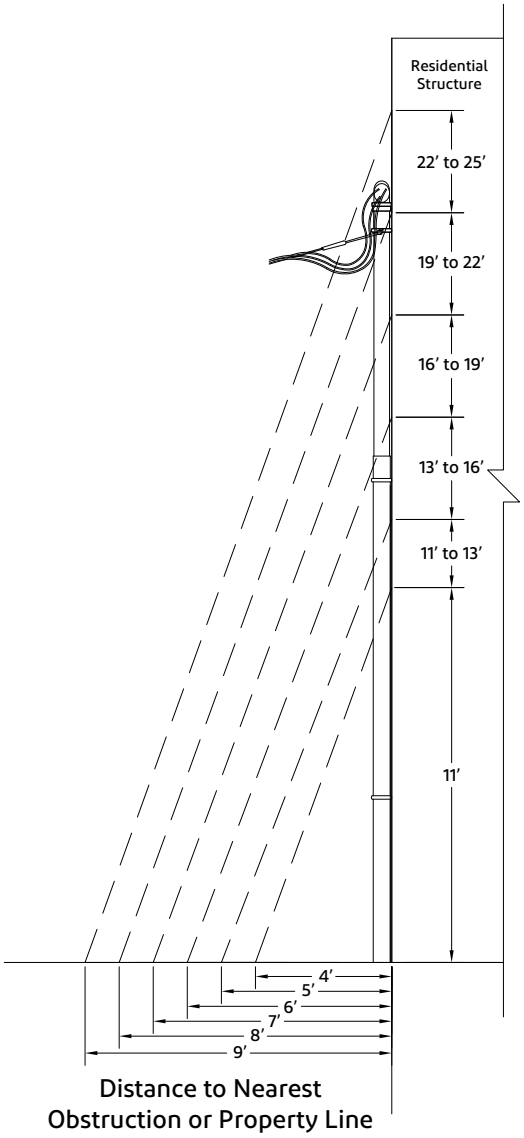
Please refer to your ComEd Project Manager for specific clearances



1. Service head
2. Service run wires
3. Service attachment
4. Rigid steel conduit (2-1/2 in. for 100 ampere or smaller, or 3 in. for larger service entrance equipment)
5. Lattice structure (1' min. vertical coverage from service wire)
6. Mounting clamp with 1/2 in. bolts, nuts and washers
7. Connectors for connecting customer's wires to service drop
8. Service drop dead-end

Ladder Access Clearance Guide

Please refer to your ComEd Project Manager for specific clearances



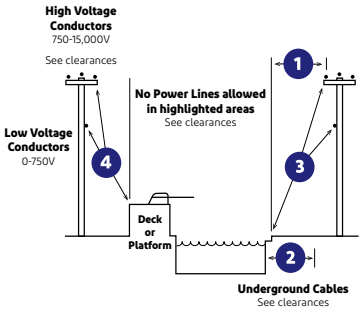
Note:

For non-vehicle accessible area, minimum service wire clearance is 12'. For vehicle accessible area, minimum service wire clearance is 18'.

Service Clearances

Minimum Clearances Near Swimming Pools

1. Horizontal limit of aerial clearance will not measure less than 10 ft. from the inside wall of the pool.
2. Underground service cable shall not be permitted under the pool or within 5 ft. of the inside wall of the pool. When space limitations prevent service cables from being routed 5 ft. or more from the pool, such cables must be installed 24 in. deep in 4 in. conduit at customer's expense. Conduit shall be buried 24" minimum cover to top of duct or per local code.



Swimming Pool Clearances	0-750 V	750-15,000 V
3 Clearance in any direction from the edge of the pool	22' 6"	24' 6"
	(without violating rule 1)	
4 Clearance in any direction to a platform	14' 6"	16' 5"
	(without violating rule 1)	

Charges may be incurred for service clearance violations.

EXERCISE EXTREME CAUTION NEAR LIVE WIRES

Do not attempt to measure exact distances to live wires due to danger of electrocution.

For latest revision on specification for required application for outdoor metering clearances see C9110 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Metering Clearances

Clearances for Meter Connection Devices

Meters are not to be installed above, below, or behind any window on the first floor or lower than the first floor.

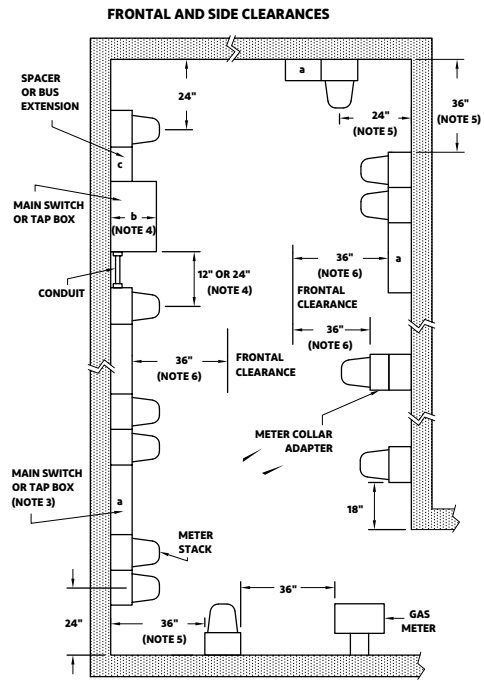
Please reference C9111 at **ComEd.com/ServiceMeterRequirements** for clarification.

Outdoor Horizontal Clearances

A. This dimension applies to the second meter fitting when two or more are mounted on adjacent corners.

B. Meters are not to be installed over a sidewalk, driveway or paved areas without protective barriers. Meters are not to be installed in locations susceptible to vehicle damage.

All dimensions shown are minimum dimensions

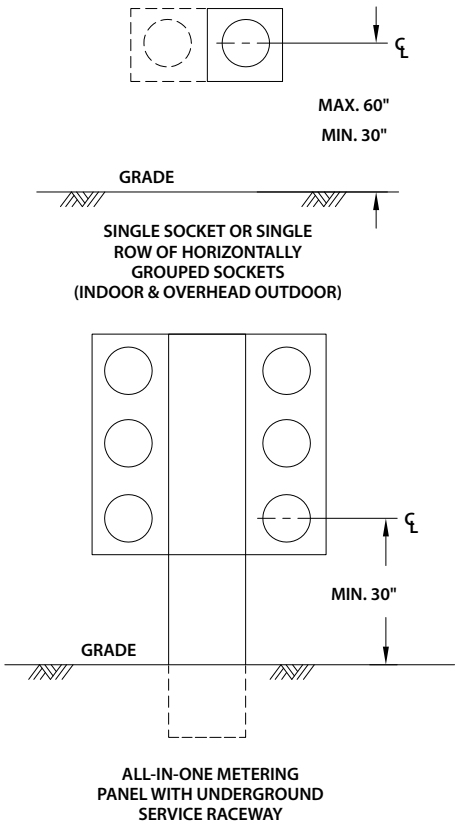


Notes:

*Refer to Specification C9110 for Notes 3 through 6 as applicable to the referenced diagram at **ComEd.com/ServiceMeterRequirements**.*

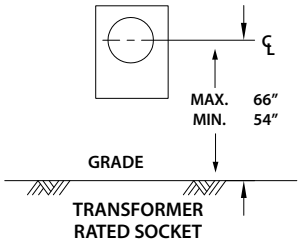
Refer to our FAQs on page 51-52 to learn when meters are required to be installed outside.

Outdoor Horizontal Clearances



SINGLE SOCKET OR SINGLE ROW OF HORIZONTALLY GROUPED SOCKETS (INDOOR & OVERHEAD OUTDOOR)

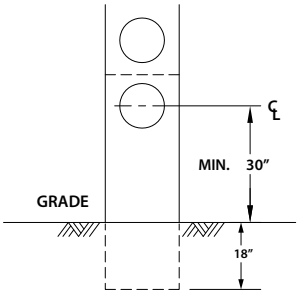
ALL-IN-ONE METERING PANEL WITH UNDERGROUND SERVICE RACEWAY



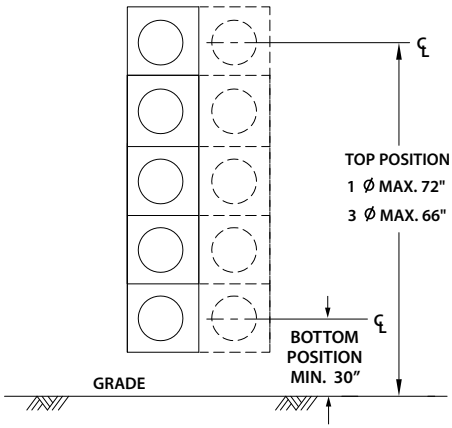
TRANSFORMER RATED SOCKET

Refer to C9110 at **ComEd.com/ServiceMeterRequirements** for the latest revision

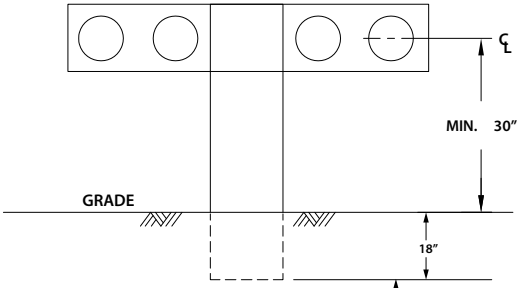
Outdoor Horizontal Clearances



SINGLE OR DOUBLE POSITION WITH UNDERGROUND SERVICE RACEWAY



VERTICALLY GROUNDED SOCKETS (INDOOR & OVERHEAD OUTDOOR)



HORIZONTALLY GROUPED SOCKETS WITH UNDERGROUND SERVICE RACEWAY

Refer to C9110 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Service Clearances

Minimum Clearances for Overhead Service Cable (120, 120/208 or 120/240 Volts)

Location	Minimum Clearances
Over streets, alleys, parking lots, public driveways, or over commercial, industrial, and farm private property driveways	18 ft.
Over residential private property driveways [where vehicles exceeding 8 ft. are not normally encountered]	12 ft. 6 in.
Spaces accessible to pedestrians only	10 ft. 6 in.
Above or below balconies and roofs* accessible to pedestrians	11 ft.
Above or below roofs* not accessible to pedestrians	3 ft. 6 in.
Horizontal clearance from windows, porches, balconies, fire escapes, signs or any part of a building normally accessible to individuals (including access for maintenance)	5 ft.

Conductors are not permitted to pass over any swimming pool or tanks containing flammable materials.

Service wire attachment shall not exceed 25 ft. above the ground at final grade.

Charges may be incurred for service clearance violations.

Example: If customer builds over ComEd power lines resulting in damage or non compliance issues.

For Underground Secondary Services:

- The minimum depth for installing secondary cable in the ground is 24 inches.
- The minimum depth for installing primary cable in the ground is 30 inches.
- The horizontal separation between the cable and gas or water lines is a minimum of 30 inches.
- The horizontal separation for the gas and electric meters is 36 inches.

Note:

**A roof, balcony or area is considered accessible to pedestrians if the means of access is through a doorway, window, ramp, stairway or permanently-mounted ladder.*

For higher voltages or variance from these clearances, contact your local ComEd Project Manager.

Additional Charges Apply

- If your trenching route requires hand digging
- If the cable must be bored under a paved surface
- If your service cable must be moved later to make room for a new swimming pool, patio, deck
- If your secondary underground service cable for front lot installation is longer than 100 ft.
- If you convert your overhead service to underground service
- If vegetation clearance is required for your non-standard service request

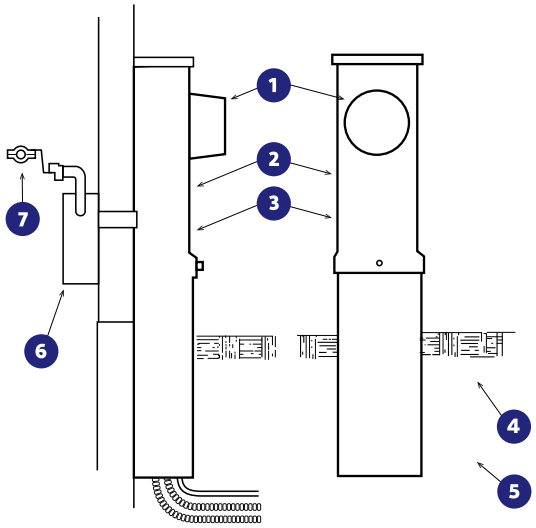
Items to consider

- ComEd buries underground cables only in the easement or property it serves.
- If you desire lot (property) line trenching, please discuss with your ComEd Project Manager as additional charges may apply.
- You are responsible for marking or exposing underground sprinkler systems, private wiring, sewers, drain tiles, etc.
- The trench route must be within 4 inches of final grade and clear from all obstacles (sheds, swing sets, tree stumps, landscaping, fencing, etc.).
- In most cases, landscape restoration is the customer's responsibility.
- If a cable fault is blocked by customer-installed structures (e.g., pavement, decks) and the customer won't remove the obstruction, relocation will be required and charges will apply.
- Conduit is required under roads/pavement by both the municipality and ComEd, and rear lot services by ComEd.

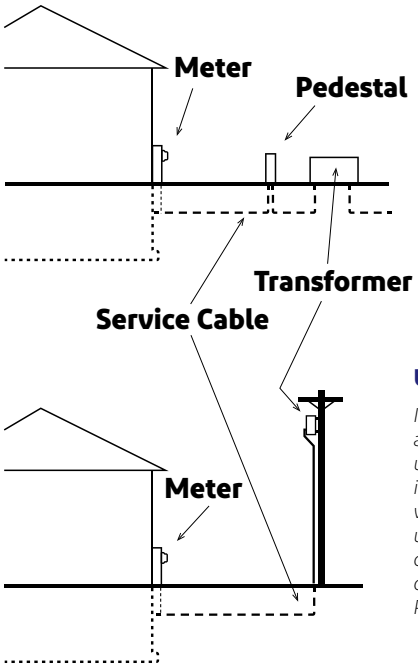
Please refer to our FAQs on pages 51-52 to learn the difference between front and rear lots and other conduit requirements. All ComEd rear lot underground cable installations, including primary, secondary, and services, shall be installed in **electrical** schedule 40, grey pvc pipe - conduit supplied by customer.

SDR - 13.5 - Black High-Density Polyethylene HDPE pipe erroneously referred to as "poly pipe" when directional boring as required. For customer-owned cable, consult with local municipal codes.

Underground Service



Refer to C9125 at **ComEd.com/ServiceMeterRequirements** for the latest revision



Underground

If your property is adjacent to a ComEd underground facility, in most cases you will be serviced by an underground service cable. Please discuss options with your Project Manager.

Glossary of Terms
Underground Equipment

1. **Meter –** a device that measures the amount of electricity used by a customer.
2. **Meter fitting –** CECHA approved housing for meter.
3. **Upper protective cover**
4. **Grounding connector –** A metallic device of suitable electrical conductance and mechanical strength used to join conductors. Please consult with local codes on grounding requirements.
5. **Grounding electrode (ground rod) –** long slender metal rod, typically of made of cooper or steel, that is buried in the ground and electrically bonded to the main service panel. Please consult with local codes on grounding requirements.
6. **Disconnecting means –** the main breaker, fuse box or breaker panel inside your home.
7. **Water pipe grounding connection –** a safety connection to provide an electrical path to ground.

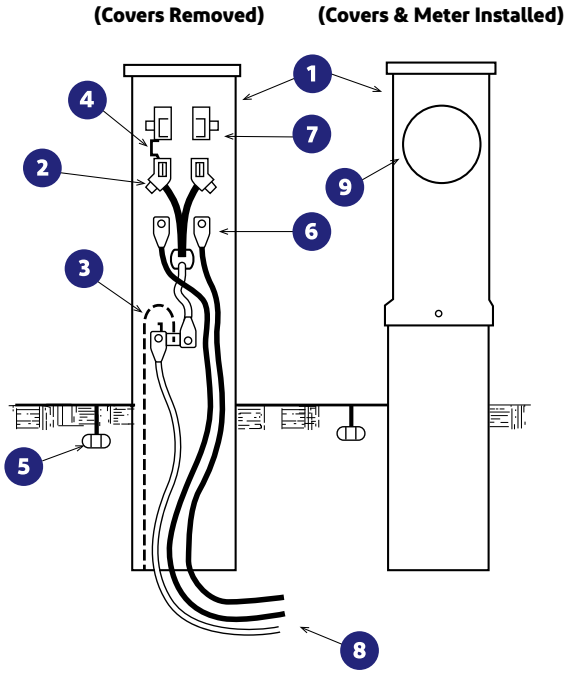
Please visit **ComEd.com/ApprovedDevices**

Note:

See pages 24-28 for important clearances which must be observed. Check local codes for requirements, such as conduit requirements. For grounding reference, see page 47-48.

Conduit – PVC pipe that service cable is installed in. Must be a 3" minimum diameter. Electrical schedule 40 grey PVC conduit or per local code [if more stringent]. Please consult with your ComEd Project Manager to confirm specific requirements.

Underground Meter Fitting and Raceway



Refer to C9125 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Underground Metering

Underground Meter Fitting and Raceway

Single-Phase, Three-Wire 120/240 or 120/208 Volts, 200 Amps Maximum Rating

Customer Furnishes, Installs and Maintains:

1. Single position combination meter fitting and raceway (200 amps maximum per meter position)
2. Meter socket load wire terminals
3. Neutral terminal
4. Fifth terminal with potential tap (#12 copper wire or equivalent) from neutral terminal (120/208 volt service only)
5. Ground connection per local code
6. Compression lug connectors for phase and neutral cables*
7. Horn type bypass

ComEd Usually Furnishes, Installs and Maintains:

8. Underground secondary service cables (slack in cables of at least 12 in. must be provided)

ComEd Furnishes, Installs and Maintains:

9. Meter

Note:

For important clearances that must be observed, please see pages 24-28.

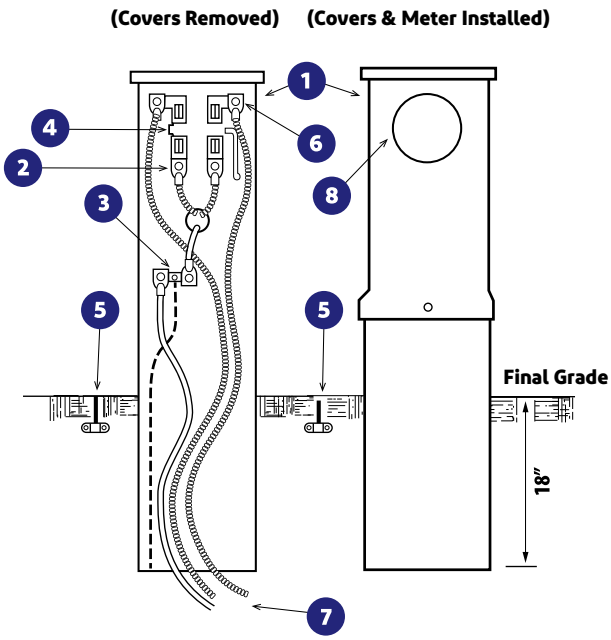
Raceway also available with factory installed main circuit breaker.

Meter fittings must be CECHA approved.

**Customer to install lugs at the meter location only when secondary service cables are provided by the customer.*

For overhead to underground installations, charges will apply.

Class 320 Meter Fitting and Raceway



Refer to C9126 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Underground Metering

Class 320 Meter Fitting and Raceway

Single-Phase, Three-Wire 120/240 400 Amps Maximum Rating

Customer Furnishes, Installs and Maintains:

1. Combination meter fitting and raceway with lever-actuated bypass
2. Compression lug connectors for load conductors
3. Neutral terminal
4. Fifth terminal with potential tap (#12 copper wire or equivalent) from neutral terminal (120/208 volt service only)
5. Ground connection, per local code
6. Compression lug connectors for phase and neutral cables*

ComEd Usually Furnishes, Installs and Maintains:

7. Underground secondary service cables (slack in cables of at least 12 in. must be provided)

ComEd Furnishes, Installs and Maintains:

8. Meter

Note:

For important clearances that must be observed, please see pages 24-28.

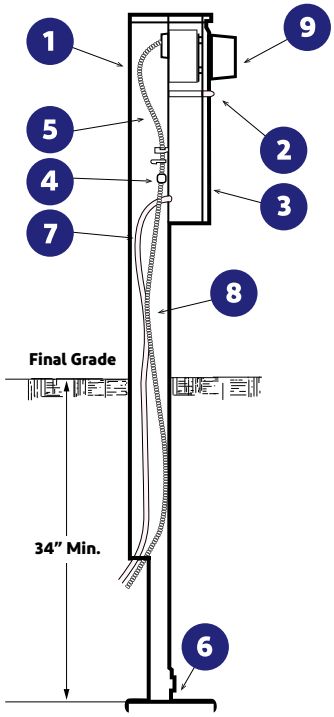
Raceway also available with factory installed main circuit breaker.

Meter fittings must be CECHA approved.

**Customer to install lugs at the meter location only when secondary service cables are provided by the customer.*

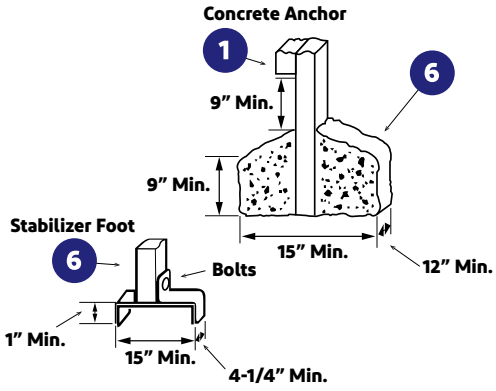
For overhead to underground installations, ComEd will supply cable protection on pole at customer's expense.

Meter Connection for Mobile Homes



Free-standing, remote from mobile home

Refer to C9125 at **ComEd.com/ServiceMeterRequirements** for the latest revision



Metering Meter Connection for Mobile Homes

Single-Phase, Three-Wire 120/240 or 120/208 Volts, 200 Amps Maximum Rating

Customer Furnishes, Installs and Maintains:

1. Combination meter fitting, raceway and pedestal (200 amperes maximum)
2. Meter connection device
3. Enclosure for disconnecting device and receptacles
4. Block for terminating secondary service cables
5. Conductors or bus extending from terminating block to meter socket line terminals
6. Stabilizer foot (#10 gauge metal) or 9 in. x 12 in. x 15 in. concrete anchor
7. Ground connection, per local code

ComEd Usually Furnishes, Installs and Maintains:

8. Underground secondary service cables with compression lug connectors. Slack in cables of at least 12 in. must be provided.

ComEd Furnishes, Installs and Maintains:

9. Meter

Note:

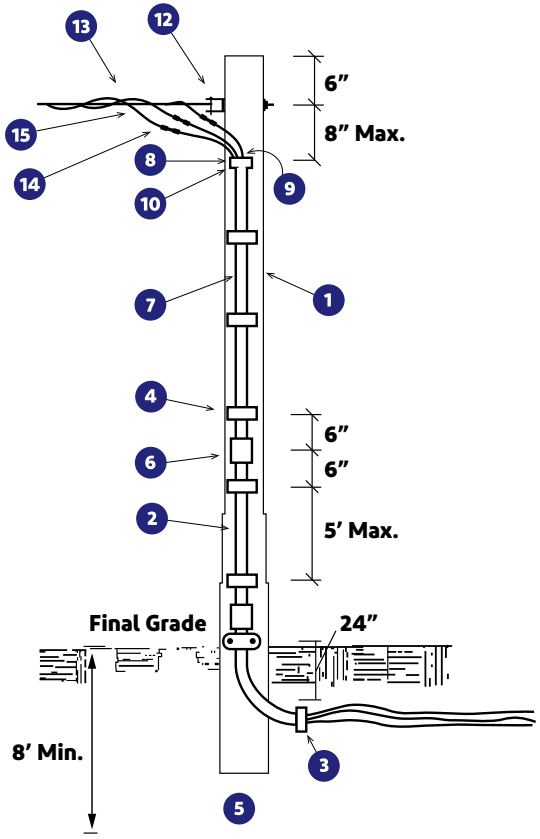
Raceway also available with factory installed main circuit breaker.

Meter fittings must be CECHA approved.

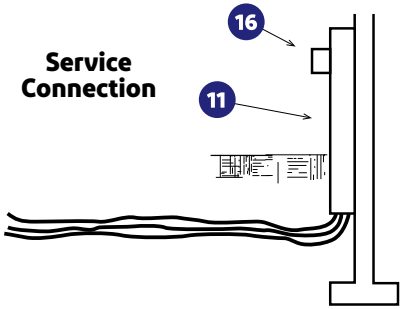
For overhead to underground installations charges will apply.

Fifth terminal with potential tap (#12 copper wire or equivalent) from neutral terminal (120/208 volt service only).

Customer's Cable Pole



Refer to C7951 at **ComEd.com/ServiceMeterRequirements** for the latest revision. Take special note that a weather-head is allowed on a customer pole - see C7951 and C7952.



Customer's Cable Pole

Customer's Cable Pole With Underground Secondary Service Connection

Customer Furnishes, Installs and Maintains:

1. Treated pole (Minimum requirements: Class #7, length 25 ft.). Customer shall consult ComEd for minimum setting depth for the class and length of pole installed.
2. Galvanized rigid metal conduit
3. Conduit bushing (if buried portion of cable is not in duct)
4. Galvanized conduit straps and/or lag screws as required

Installation of Customer's Cable Pole and Underground Secondary Service Connection

Customer Furnishes, Installs and Maintains:

5. Ground rod, conductor and clamps for grounding metallic conduit on pole - please consult with local codes on grounding requirements
6. Outdoor adapter coupling for metallic to non-metallic conduit (Conduit bushing to be installed if "U" guard is used above first 10 ft. section)
7. Non-metallic rigid conduit or "U" guard
8. Cable support
9. Cable in conduit. Cable to extend beyond conduit with enough extra to make connections on pole.
10. Sealing compound
11. Meter fitting
12. Fork bolt

ComEd Furnishes, Installs and Maintains:

13. Service drop dead-end
14. Connectors for connecting customer cable
15. Service drop cable
16. Meter

NOTES

Temporary Service

Items to consider

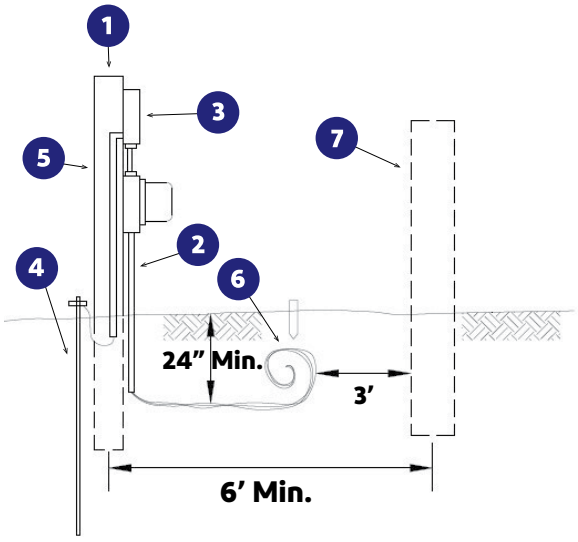
Notify ComEd's New Business Department by submitting your application through the New Business Portal as soon as possible to allow ample lead time to meet your requirements.

For temporary services, charges will apply. Your ComEd Project Manager will provide actual costs based on your requirements.

Required information

- Address where service is needed
- Your contact information
- Your SSN or Tax ID
- Your electrician's or contractor's contact information
- The type of work you are doing, such as installing a deck, a pool, an addition, or a new home
- If you live within the City of Chicago, you must have a City of Chicago permit number as well
- Outside of the City of Chicago, a city approved inspection is required
- Date service is needed
- Estimated duration of temporary service (charges will apply for unauthorized temporary service connections utilizing existing service equipment)

Underground Service and Outdoor Meter Fitting



Refer to C7890 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Customer Furnishes, Installs and Maintains:

1. Service support, treated timber (4 in. x 4 in. x 8 ft. minimum) to be set a minimum of 3 ft. in the ground on private property
2. CECHA approved meter fitting
3. Lockable, weather-tight service disconnect for disconnecting means and distribution facilities
4. Ground rod, conductor and associated conduit and clamps per local code
5. Conduit, service conductors, insulated bushings and conduit clamps per local code

Note:

Charges will apply for unauthorized temporary service connections utilizing existing service equipment.

Underground Service and Outdoor Meter Fitting

6. Service cable

   Sized to conform to local code requirements

   Customer will direct bury cable as shown but not closer than 3 ft. from ComEd's transformer pad or pedestal

   Any trenching by customers in easement shall be done as directed by ComEd

   Before digging, call at least 48 hours in advance for cable locating

   Seal cable ends from moisture

   Mark cable end to identify neutral conductor

   Customer to provide an additional 10 ft. of cable for ComEd to make connections inside the transformer or pedestal

ComEd Furnishes, Installs and Maintains:

7. ComEd service pedestal or transformer located in easement. ComEd will provide connectors for and connect customer's cables within the ComEd closure.

Customer shall not move or tamper with temporary service facilities as long as service is energized.

Customer is responsible to lock the service disconnect equipment to protect persons from electrical contact.

Note:

All work performed and equipment provided by ComEd will be at the customer's expense.

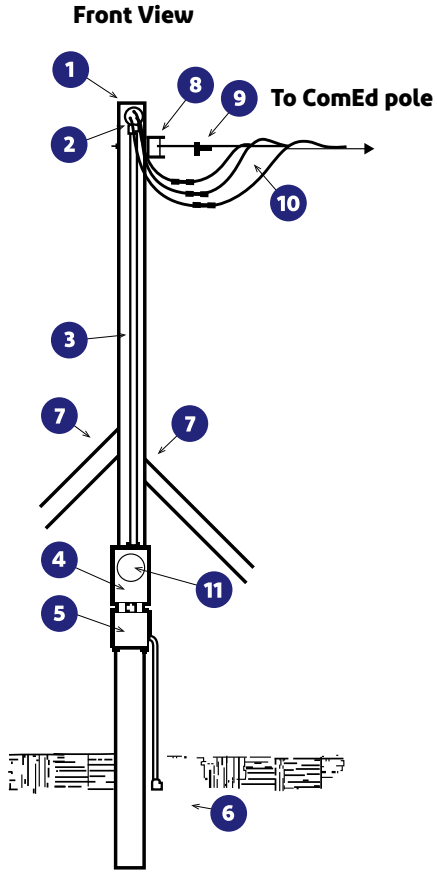
Conduit is required under roads/pavement or by the municipality.

Service trench must be backfilled with clean material.

Please notify your ComEd Project Manager ahead of time to schedule the disconnection of your temporary service.

Customer Service Pole

Overhead Service



Refer to C7885 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Note:

See page 23 for Ladder Access Clearance Guide.

See Temporary Service Pole Bracing, page 46.

All work performed and equipment provided by ComEd will be at the customer's expense. Please notify your ComEd Project Manager ahead of time to schedule the disconnection of temporary service.

Customer Service Pole

Installation of Customer Service Pole and Outdoor Meter Fitting

Customer Furnishes, Installs and Maintains:

1. Treated pole (Minimum requirements: Class #7, length 25 ft.) or a braced, 6 in. x 6 in. timber of an appropriate length. Customer shall consult ComEd for minimum setting depth for the class and length of pole installed.
2. Provide required service head height and wire length left hanging
3. Service entrance cable or conductors in conduit with clamps spaced at a maximum of three feet. Allow sufficient wire to make connection to service drop.
4. Provide minimum and maximum height of meter fitting
5. Lockable, weather-tight enclosure for disconnecting means
6. Ground rod, conductor, and associated conduit and clamps for grounding metallic components - please consult with local codes on grounding requirements
7. When a 6 in. x 6 in. timber is used, install 2 in. x 4 in. braces and stakes fastened by 5/8 in. machine bolts with two washers and two nuts
8. Advice where fork bolt should be located

ComEd Furnishes, Installs and Maintains at Customer's Expense the Following Equipment Only if Service Drop Terminates at the Pole:

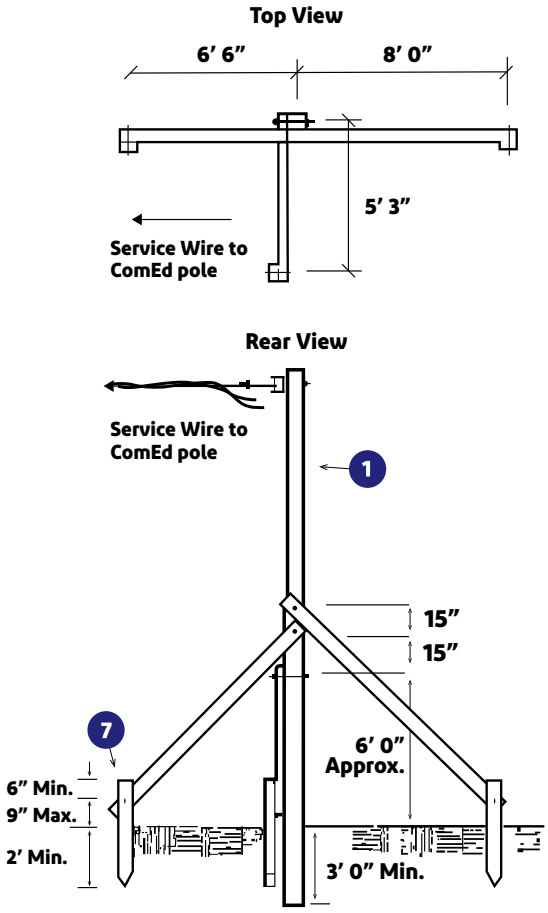
9. Service drop dead-end
10. Connectors for connecting customer's cable to service drop. Customer to notify ComEd of cable size.

ComEd Furnishes, Installs and Maintains at Customer's Expense

11. Meter

Temporary Service

Temporary Service Pole Bracing



Refer to C7885 at **ComEd.com/ServiceMeterRequirements** for the latest revision

Charges will apply for unauthorized temporary service connections utilizing existing service equipment.

Note:

Installation of braced, 6 in. x 6 in. timber is not approved for locations at which people congregate, such as picnic or carnival grounds. Please refer to your ComEd Project Manager for more information.

See Temporary Service Pole Detail, page 44.

Grounding

Items to consider

Grounding is one of the most important, but least understood, aspects of a home electric system. It is a safety system that helps protect you and your family from dangerous shocks and devastating fires. Make certain that your electrician is careful to follow all grounding provisions of the electrical code that applies to your home.

The National Electrical Code is the minimum standard by which grounding systems are judged. Local ordinances often are more strict and must be satisfied before service will be connected by ComEd.

Grounding

All metallic components and conductors of the service entrance equipment must be permanently grounded so that if a metallic component should come in contact with any wire, no dangerous current will pass through a person who may touch it.

Check the local codes for your area regarding details of how the ground connection should exist. ComEd adopted the minimum acceptable standard as outlined in the National Electrical Code. The more stringent of the two governing bodies will apply when determining if the ground connection is acceptable.

Please refer to the minimum standards as described by the National Electrical Code.

The proper installation of a grounding system to an underground water piping system is as follows:

- The ground wire will originate from the grounding screw in the cabinet of the first disconnect or fuse.
- The metallic protection of the ground wire must be connected to the cabinet that it originates from.
- The ground wire size must conform to the National Electrical Code standards.
- Grounding shall be approved by the authority having jurisdiction.
- ComEd will not complete the service installation if a ground rod is positioned in front of or obstructing the meter fitting where its location impedes the proper operation of the meter fitting

Service Project Worksheet

This page is provided to help you organize your information before you call for service.

Customer Information

Customer name

For new customers, Social Security Number or Tax ID

ComEd account number

Daytime telephone	**Home telephone**
Electrician/contractor's name	**Telephone**

Name of inspector/contact at local governing body

Telephone	**Electrical permit #:**

Service Information

Address where service is to be provided

Street **City**

☐ New Service ☐ Revise Existing Service (Relocate)
☐ Upgrade Existing Service

Type of service

☐ Overhead ☐ Underground ☐ Overhead to Underground

Voltage

☐ 120/240 ☐ 120/208

Amperage

☐ 100 ☐ 200 ☐ 320 ☐ Other

Size of customer cable

Preferred meter location

Date electrician will complete work

Date you want ComEd to complete service installation

Possible future improvements to be considered:

☐ Shed ☐ Garage ☐ Deck ☐ Patio
☐ Pool ☐ Room Addition ☐ Fence ☐ Other

Notify your local phone, cable TV and other utilities if your project will involve their facilities.

Service Project Worksheet

This page is provided to help you organize your information before you submit your application on the New Business Portal.

Customer Information

Customer name

For new customers, Social Security Number or Tax ID

ComEd account number

Daytime telephone	**Home telephone**
Electrician/contractor's name	**Telephone**

Name of inspector/contact at local governing body

Telephone	**Electrical permit #:**

Service Information

Address where service is to be provided

Street **City**

☐ New Service ☐ Revise Existing Service (Relocate)
☐ Upgrade Existing Service

Type of service

☐ Overhead ☐ Underground ☐ Overhead to Underground

Voltage

☐ 120/240 ☐ 120/208

Amperage

☐ 100 ☐ 200 ☐ 320 ☐ Other

Size of customer cable

Preferred meter location

Date electrician will complete work

Date you want ComEd to complete service installation

Possible future improvements to be considered:

☐ Shed ☐ Garage ☐ Deck ☐ Patio
☐ Pool ☐ Room Addition ☐ Fence ☐ Other

Notify your local phone, cable TV and other utilities if your project will involve their facilities.

FAQs

1) What is the difference between the City of Chicago and Outside of Chicago for New Business request?

City of Chicago

A) <= 400 amps residential
B) >= more than 400 amps commercial

Outside of Chicago

A) <= 1200 amps, 1-phase residential or commercial service
B) 3-phase commercial service with on-site facilities

Subdivisions (Outside of Chicago)

A) New Construction >= 5 lots or buildings

Note: Occasional or unique requests may fall outside standard guidelines and will be reviewed individually.

2) Is conduit required in the rear lot?

Yes conduit is required in the rear-lot. Additionally, where rear-lot utility easements are mandated by the authority having jurisdiction primary and secondary cable installations shall be in conduit regardless of the location on the lot.

3) Is conduit required for meters located in excess of 100ft from easement?

Refer to question 11 for more information.

4) Can I be charged for illegal connections?

Tampering with a company meter, breaking of meter seals, and/or installing conductors to carry unmetered current is prohibited by law. Meters or service connections, etc. shall not be disconnected, removed or relocated without the company's authorization. Tampering with any meter, the associated wiring or related facilities to reduce a customer's metered usage may result in disconnection of service and/or require a service deposit.

5) Can I install an overhead meter fitting that is feeding an underground service or vice versa?

A meter that will be compatible with OVHD and UG will have a hub opening on the top plate/cover and a compatible raceway from the manufacturer. If a meter does not have a hub plate on the top, then it cannot be used for OVHD. If the meter does not have a compatible raceway from the manufacturer, then it cannot be use for UG.

6) Why do I have to relocate or upgrade my meter when installing solar or EV installation?

Regardless of the type of request, clearance guidelines still apply and must be updated to current standards when working on existing meter fittings or handling non-standard requests, including panel changes or revisions.

7) Can a second meter fitting be installed on an attached garage/ structure without a second service drop?

No, per spec C9111, 1.3 and 5.9, this is not allowed.

8) Can I temp out my own service since ComEd is taking too long?

ComEd's tariff does not allow for a customer to tamper with our metering and service equipment.

FAQs

9) Can I request 3-phase service for my residential home?

Yes, you can request it. However, if the added load does not qualify for 3-phase, single-phase service is standard. If 3-phase is still requested, additional charges will apply.

10) Why can't I install a ring style meter fitting?

Ring-style meter fittings are not part of the approved catalog and must not be used, to ensure safety and proper maintenance. Please visit **ComEd.com/ApprovedDevices**.

11) What is the difference between rear lot and front lot?

ComEd provides standard front-lot service when the customer's meter fitting is located on or adjacent to the wall closest to the street, and the serving pole or pedestal is positioned along the street. This front-lot standard, implemented in 2020, was designed to enhance response times during emergency situations. Front-lot installations are typically situated within the front half of the property closest to a public road and must allow unobstructed access for construction equipment.

Nonstandard rear-lot service is provided when the customer's meter fitting is not located on or adjacent to the street-facing wall, and/or the ComEd's serving equipment (pole, transformer, or pedestal) is not positioned along the street. These installations often require service cables to pass through gates, fences, or other barriers that may hinder access for maintenance and restoration crews. In such cases, the customer is responsible for furnishing, installing, owning, and maintaining conduit in accordance with ComEd specifications. Please note that certain local governmental authorities mandate rear-lot service installations. For more information, discuss with your ComEd Project Manager.

12) When are meters to be installed outside?

When the utilization voltage is 480 volts or less and the disconnecting means is rated at 200 through 1200 amperes, the metering equipment, where practicable, shall be installed outside of the building. The metering equipment includes the meters, the associated current transformers and the demand metering equipment.

There is no limit on outdoor meters. The meter bank design depends on several parameters such as outdoor constraints and cold vs. hot sequencing. Pending a number of variations—where practicable, case by case scenario—standards vary between inside the city of Chicago and outside the city of Chicago.

13) At the weather head, should I label the neutral wire with white tape? Also should the line and load sides be marked?

It is recommended that you identify the line and load sides, the neutral and phases in the meter fitting and discuss and confirm with your Project Manager to avoid confusion.

14) If I am reducing the number of meters, why can't I just leave the empty fitting(s)? I am not using the blank meter fitting.

Plating the openings of unused fittings is acceptable. However, the load wires must be removed from the unused fitting and the enclosure must be an approved type and approved by the governing authority. Please visit **ComEd.com/ApprovedDevices**.

15) Where can I get more information about solar or electric vehicles?

Please visit **ComEd.com/Solar** and **ComEd.com/EV**.

When the lights go out on a stormy night, how long are you willing to wait?

Imagine yourself alone in a driving rain storm, searching in the dark through strange back yards for a camouflaged 3 ft. x 3 ft. steel box. Perhaps it is hidden by a fence, under a bush or behind a garden. All you know for sure is that it's near the property line. Your family and neighbors are waiting for you to find it, unlock it, open it and use a 8-foot long pole to actuate a 12,000-volt switch and turn everyone's lights back on. These are the obstacles that our trouble crews are faced with during the restoration of outages.

Power lines, underground cables, poles and ground-level equipment need space. To maintain and operate our equipment, and to avoid damage to your property, we need your cooperation in where you place flower beds, gardens, bushes and fences.

Help us keep your power on and trouble-free. Leave 10 ft. open in front of ground-level transformers (the side with numbers) and allow access to poles and underground cables so our repair crews can find and repair electrical equipment without damaging your property.

When vegetation management (tree trimming, removal) is required, there may be mitigating circumstances that may allow for unusual work to be performed that is different from normal work performed during a storm.
Visit: **ComEd.com/TreeTrimming**

We value your opinion and want to hear from you. Send us your thoughts/suggestions/concerns to:
CustomerAdvocateNB@ComEd.com